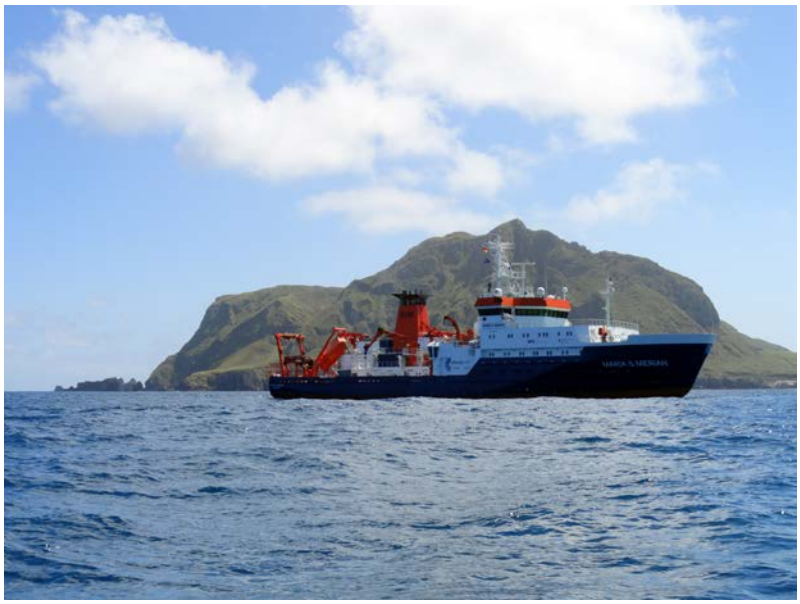
RV Maria S. Merian, MSM 24

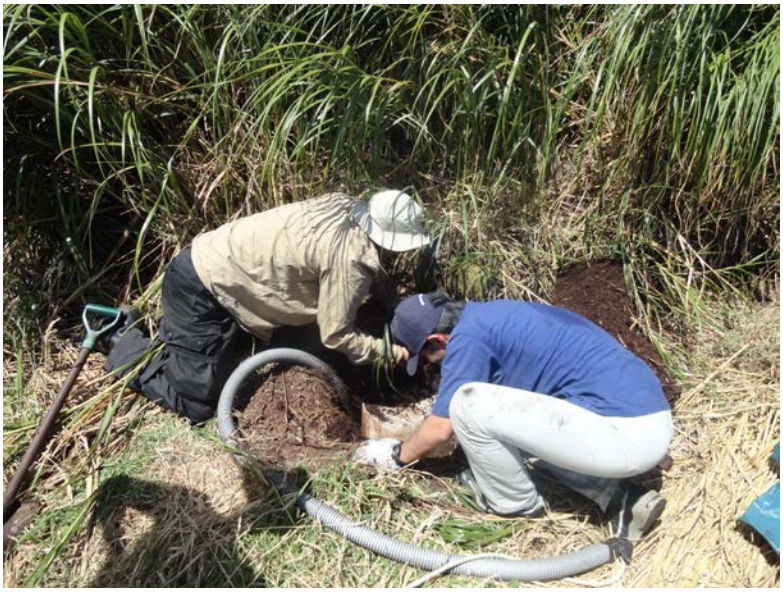
27.12.2012 Walvis Bay – 21.1.2013 Cape Town

Weekly Report No 3 (07.01. - 13.01.2012)

At the beginning of the third week the weather got better considerably. So we took the opportunity to head for Edinburgh of the Seven Seas on Monday afternoon. There, the South African harbour engineer and two scientists were disembarked. The two scientists planned to carry out geological sampling during the next two days. In the following night, two ocean-bottom stations were recovered close to the island. On Tuesday we headed for the island of Nightingale, a small island to the south-southwest of Tristan da Cunha. On the island two seismological and one magnetotelluric stations were installed one year ago to complete the network of ocean-bottom stations and permanent stations on Tristan da Cunha. Therefore, four scientists and three Tristanians landed in a rubber boat to recover these stations. At the coastline of Nightingale some penguins and seals were already waiting. We were happy that two stations were still running. During the last eleven months they got their power from solar panels. If the recorded data is as nice as the island, we will see back home at the institute.



Maria S. Merian in front of Nightingale (Foto: O. Schwartz)

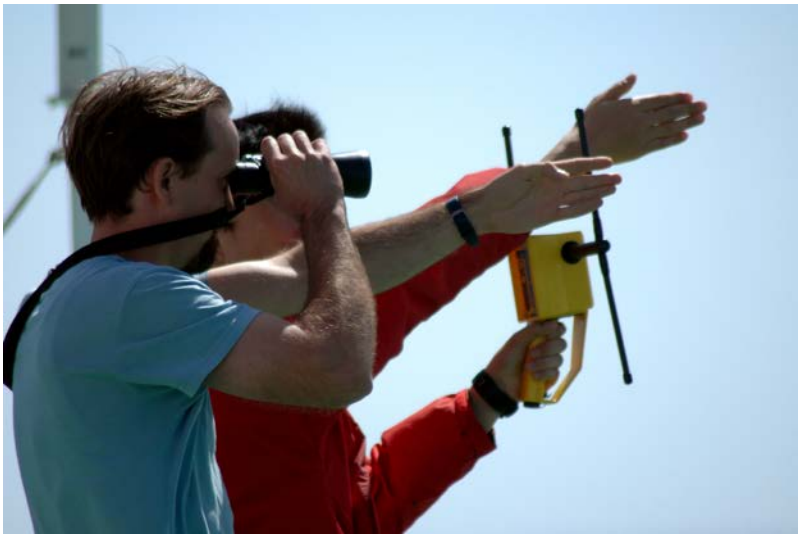


Recovery of a land seismometer (photograph: O. Schwartz)

While a team of scientists was working on the island, the Maria S. Merian stayed close to Nightingale mapping the seafloor in the vicinity. Since the sea is very shallow around the islands, we used the shallow water multibeam echo sounder EM1002 for mapping. In the following night we successfully recovered two more ocean-bottom stations.

On Wednesday we headed again towards the island of Tristan da Cunha to fetch up the two scientists. Furthermore, we used the possibility to show our beautiful and modern research vessel to some islanders. The captain, Ralf Schmidt, had invited all interested inhabitants of the island to come on board of the vessel for a sightseeing tour on the Maria S. Merian. Besides the Administrator of Tristan da Cunha, Sean Burns and his wife, the local field guides and their children joined for this event. After the captain welcomed the Tristanians some refreshments, such as coffee and cake, were served in the mess. Afterwards they joined the tour, guided by the captain itself, throughout the upper decks of the Maria S. Merian. Following, the chief engineer Thomas Ogrodnik showed the engine room and lower decks. Finally, the scientists presented some of our ocean bottom instruments we had successfully recovered the night before and explained the background for our expedition.

On Wednesday evening we left Tristan with a nice sunset glow heading north-westwards to continue recovery of the ocean bottom instruments. Unfortunately, this second part of the expedition started with a disappointment. One of our ocean-bottom seismometers answered our acoustic commands, but it did not release from the seafloor. After several failed attempts to release our instrument the schedule forced us to head for the next recovery point. Except one more ocean bottom seismometer, the following stations were recovered successfully from the seafloor, while the weather and sea conditions were excellent.



A station is recovered at sea surface (photograph: H. Leu)

At this point I want to thank indeed the whole crew of the Maria S. Merian for the successful recovery of 48 stations. On the transit between the recovery points, the seafloor was mapped again. We tried to go parallel to the tracks from the last cruise. Furthermore, the areas around the recovery points were mapped. This leads to the opportunity to correct the acquired magnetotelluric data for topographic effects.

Not only due to the excellent external conditions, we are still in a good mood and quite satisfied. With best regards from the region around Tristan da Cunha

13.01.2013, 37° 3.14’ S 13° 13.74’ W, 17°C Wolfram Geissler